

**BRANCH PREDICTOR SUITABLE FOR MULTI-PROCESSING
MICROPROCESSOR**

Abstract of the Disclosure

5

A branch predictor generates an index to access a branch prediction table storing branch prediction reference data therein, considering a branch history, a branch instruction address, and a process ID. Accordingly, although context switching frequently occurs and a plurality of processes are under operation simultaneously in single microprocessor, the branch predictor has a high hit ratio of branch prediction. From the standpoint of an operating system of a computer system, the hit ratio is enhanced to reduce a stall phenomenon in the pipeline. As a result, program execution time can be shortened.

TOKYO ELECTRON LTD.

10

15
K:\samsung\192\192patapp4.doc